Serial No.: 10/657,275 Attorney's Docket No.: COS0003-CIP

Art Unit: 3627

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Amendments to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in this application.

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Listing of Claims:

1. (Currently Amended) In a system comprising a real estate database containing information regarding commercial real estate properties, a method for disseminating information contained in the real estate database comprising:

receiving from a user a series of points on a map that define a polygonal search area;

bounding the polygonal search area in a box;

subdividing the box into latitude/longitude sub-boxes;

identifying the sub-boxes as one of inside, outside, and intersecting;

repeating the subdividing and the identifying for the intersecting sub-boxes, up to a predefined number of iterations, resulting in identified inside sub-boxes and remaining intersecting sub-boxes;

receiving search attributes from the user;

searching the real estate database for properties within the polygonal search area identified inside sub-boxes and the remaining intersecting sub-boxes that meet the search attributes; and

displaying, to the user, information about the properties within the polygonal search area identified inside sub-boxes and the remaining intersecting sub-boxes that meet the search attributes.

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2. (Original) The method of claim 1, wherein the search attributes are specific to properties for

lease.

3. (Currently Amended) The method of claim 1, wherein displaying comprises plotting an icon

on the map a location corresponding to a property within the polygonal search area identified

inside sub-boxes and the remaining intersecting sub-boxes that meets the search attributes.

4. (Original) The method of claim 3, further comprising displaying a photograph of the

property when a mouse pointer is positioned over the icon.

5. (Currently Amended) The method of claim 1, wherein displaying comprises displaying a list

of the properties within the polygonal search area identified inside sub-boxes and the remaining

intersecting sub-boxes that meet the search attributes, wherein the list provides property

descriptions, property addresses, and property prices.

6. (Original) The method of claim 1, wherein the polygonal search area is irregular.

7. (Original) The method of claim 1, wherein the map is an aerial photograph.

8. (Currently Amended) A method for retrieving geographic-based commercial real estate data

comprising:

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receiving an a polygonal area drawn on a map;

converting the drawn area into pixels by bounding the drawn area in a box and subdividing the box into pixels;

converting the pixels into latitude and longitude coordinates;

calculating a spatial index based on the latitude and longitude coordinates by:

identifying the pixels as one of inside, outside, and intersecting; and

repeating the subdividing and the identifying for the intersecting pixels, up to a

predefined number of iterations, resulting in identified inside pixels and remaining intersecting pixels;

searching the commercial real estate database for properties matching the having latitude and longitude coordinates and the spatial index within the identified inside pixels and the remaining intersecting pixels; and

displaying the matching properties <u>having latitude and longitude coordinates within the</u> identified inside pixels and the remaining intersecting pixels.

9. (Canceled)

10. (Currently Amended) The method of claim 8, wherein the drawn area is a polygon, and wherein converting the drawn area into pixels comprises converting the drawn area into comprise multiple quadrangles based on the polygon.

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11. (Currently Amended) The method of claim 8, wherein the latitude and longitude coordinates pixels are converted into latitude and longitude coordinates by sending an XML message to a

mapping application.

12. (Currently Amended) The method of claim 8, further comprising receiving additional search

attributes, and wherein searching comprises searching the commercial real estate database for

properties matching the latitude and longitude coordinates, the spatial index, having latitude and

longitude coordinates within the identified inside pixels and the remaining intersecting pixels and

matching the search attributes.

13. (Original) The method of claim 12, wherein the search attributes are specific to properties

14. (Original) The method of claim 12, wherein the search attributes include price per building

square foot, gross acres, and year built.

15. (New) The method of claim 1, further comprising recombining the identified inside sub-

boxes and the remaining intersecting sub-boxes.

16. (New) The method of claim 15, the recombining comprising:

monitoring which iteration of subdividing and identifying produced each sub-box;

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for each iteration starting with the most detailed iteration to the least detailed iteration, combining, for each row within an iteration, any two sub-boxes that have matching edges and are identified the same as between inside and intersecting, and combining, for each column within an iteration, any two sub-boxes that have matching edges and are identified the same as between inside and intersecting; and

repeating the combining until no more recombinations are found,

the searching comprising searching for properties within combined inside sub-boxes and
combined intersecting sub-boxes.

- 17. (New) The method of claim 1, further comprising filtering the properties within the intersecting sub-boxes using a point-in-polygon algorithm.
- 18. (New) The method of claim 8, wherein calculating the spatial index further comprises recombining the identified inside pixels and the remaining intersecting pixels.
- 19. (New) The method of claim 8, the recombining comprising:

monitoring which iteration of subdividing and identifying produced each pixel;

for each iteration starting with the most detailed iteration to the least detailed iteration,

combining, for each row within an iteration, any two pixels that have matching edges

and are identified the same as between inside and intersecting, and

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combining, for each column within an iteration, any two pixels that have matching

edges and are identified the same as between inside and intersecting; and

repeating the combining until no more recombinations are found,

the searching comprising searching for properties within combined inside pixels and

combined intersecting pixels.

20. (New) The method of claim 8, the spatial index comprising an XML document listing the

identified inside pixels and the remaining intersecting pixels, and the method further comprising

submitting the XML document to an SQL server to retrieve latitude and longitude coordinates of

the identified inside pixels and the remaining intersecting pixels.

21. (New) The method of claim 8, wherein calculating the spatial index further comprises

ignoring the outside pixels.